

BOOK REVIEWS, NOTES AND COMMENTS

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LA MENTE IN FIAMME
Un nuovo approccio alla depressione
Edward Bullmore
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[The inflamed mind. A radical new approach to depression]

If you ever had a month in your life in which you had disturbed sleep, failed to find joy, no longer considered pleasant activities... pleasant, lost or gained a considerable fraction of your body weight, and even contemplated suicide as a foreseeable option, then, we are sorry to welcome you to depression, one of the most common illnesses worldwide. It is so common that almost anyone of us either went through it or had a close relative facing such a debilitating disease during lifetime. Unfortunately, it never rains but it pours. Whilst the blunt numbers (300 million affected people worldwide) are still counting, the available weapons to contrast this epidemic have a very limited efficacy: why are current treatments so poor? Can we do something to improve them?

Edward Bullmore provides his cogent personal view to these fundamental questions in "The inflamed mind: A radical new approach to depression", a thorough, thought-provoking, and extremely well-articulated essay in which the principal message is that depression is not just a mental disorder but rather an integrated bodily response to an inflammatory agent. Specifically, the core proposition of the book is that – rather than representing the outcome of pathologic processes occurring in our neurons – depression may also stem from an inflammatory response occurring far away from the brain, but sneaking into the site of our thoughts and emotions through previously unexplored backdoors. Ultimately, this exciting theory – if proven correct – may unravel one of the causes of depression and, most importantly, potentially disclose new avenues in the treatment of this disease.

Let alone the scientific interest, this book is a must-read for every scholar with an interest in depression. It is scientific dissemination at its best, and an extremely erudite one: the book spans from common-life facts to philosophy (at length) and then to evolution, immunology and neuroscience. Bullmore makes the description

of such a complex biological phenomenon accessible to its readership. Let's be honest though: it is not for everyone. We are afraid that a discussion of this book won't be the main topic during the half-time interval of a Serie-A football match, but history may prove us wrong.

After an introductory section, the psychiatrist Edward Bullmore takes the reader where everything started: a dental clinic. In the hours after the removal of a tooth root, the Author felt a worsening of his mood which rapidly improved shortly thereafter. This episode remained silent in the Author's memories for ages. Yet, after years and after having seen many depressed patients (many of which without an efficient cure), he had an insight which prompted him to connect his temporary blue with the inflammation caused by the tooth root removal. The seed is now planted, Bullmore has whispered his theory in the reader's ear and, from now on, the reader won't stop thinking about his personal experience and try to find analogies.

From this point onwards, the Author details his theory reconciling and integrating diverse disciplines. And the reading is a joy. From a medical perspective, the Author describes all the phases that led to the production of the current treatment of depression. In particular, Bullmore drifts from medicine to philosophy to criticise the "Cartesian dualistic view" – brain and body as independent entities – that for more than 350 years plagued the consideration of mental disturbances. According to him, the "body" vs "mind" dualism has hampered the development of appropriate treatments whereby it segregated mental illnesses to the brain and prevented scholars from considering the possibility that the body-outside-of-the-brain directly affected the mind-inside-the-brain. This is the main reason why, while other fields of medicine have recently spotted major leaps in knowledge and treatment, depression has been invariably approached with the same old-fashioned, yet valid in many patients, treatment (the famous selective serotonin reuptake inhibitor, SSRI, and psychotherapy).

Then, Bullmore delves into solid scientific data to support his theory: many instances of depression depend on secondary effects exerted, at the level of the brain, by proteins secreted in response to infections. The data in support of this theory range from epidemiology, to clinical studies and animal models. For example, he notices that some biomarkers of the immune response (e.g. cytokines) are higher in depressed patients than in healthy subjects; furthermore, he describes prospective studies indicating that a person that has suffered from a major inflammatory state early in life has a probability to develop depression which is much higher than that observed in the general population. Laboratory studies presented in a fully intelligible fashion support these findings. Together, these data do not prove that all depressed patients are also inflamed, or the contrary, but



they highlight that depression and inflammation often coexist. Then, the author further details his hypothesis by providing the cellular and molecular mechanism that may link a tooth root removal with depression: cytokines, microglia, neurons, and a plentiful of other biological jargons are all clarified and smoothly bridged to mental disorders. Finally, all this rich and entertaining bulk of knowledge is summoned to provide the reader with the answers to the original questions of the book: Why are current treatments so poor? Probably because our approach to depression is still remarkably biased by the Cartesian dualism.

Can we do something to improve our current treatment of depression? Yes, provided that we contemplate the possibility of a paradigm shift in the field of mental

disorders. Specifically, the cross-fertilization between psychiatric and “somatic” disciplines shall result in the advocated personalised medicine. This will rest upon innovative biomarkers that will first allow stratifying patients based on their inflammatory history and then treat them accordingly.

Whether this book will contribute to such a paradigm shift is unknown; whether the paradigm shift will improve the quality of life of patients is yet unknown too; that readers will enjoy the book is known...

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